

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1-31. (Canceled)

32. (Currently Amended) A method of cleaning a wafer comprising:
spinning a wafer having a frontside and a backside;
exposing said frontside of said spinning wafer to an etchant or cleaning chemicals;
after exposing said wafer to said etchant or cleaning chemical and prior to dispensing ~~DI~~ DeIonized (DI) water on said etchant or cleaning chemical covered wafer exposing said frontside of said spinning wafer to a liquid or vapor having a lower surface tension than water; and
after exposing said wafer to said liquid or vapor having a lower surface tension than water, rinsing said frontside of said wafer with DI water.

33. (Canceled)

34. (Currently Amended) The method of claim 32 further comprising applying megasonics energy to said backside of said wafer while exposing said frontside of said wafer to said cleaning chemicals or etchants.

35. (Canceled)

36. (Currently Amended) The method of claim 32 further comprising applying megasonics energy to said backside of said wafer while rinsing said frontside of said wafer.

37. (Currently Amended) A method of rinsing chemicals or etchants from a wafer comprising:

rotating a wafer having a frontside and a backside;

dispensing cleaning chemicals or etchants onto said frontside of said wafer to form an etchant or chemical covered wafer;

immediately after dispensing said cleaning chemicals or etchants onto said rotating wafer, applying a liquid or vapor having a lower surface tension than water onto said cleaning chemical or etchant covered wafer; and

immediately after applying said liquid or vapor having a lower surface tension than water, dispensing DeIonized (DI) rinse water onto said frontside of said spinning wafer.

38. (Currently Amended) The method of claim 37 further comprising heating said DI rinse water prior to dispensing said DI rinse water on said frontside of said wafer.

39. (Currently Amended) The method of claim 38 wherein said DI rinse water is heated to a temperature between 60-70°C.

40. (Currently Amended) The method of claim 37 further comprise applying megasonics energy to said backside of said wafer while dispensing said DI rinse water onto said frontside of said wafer.

41. (Currently Amended) The method of claim 37 further comprising stopping said dispensing of said DI rinse water and spinning said wafer dry.

42. (Currently Amended) A method of cleaning or etching a wafer comprising:

placing a wafer having a frontside and a backside on a support over a plate having a plurality of transducers formed thereon, wherein said wafer is horizontally supported and separated by a gap from said plate;

flowing a liquid in said gap between said backside of said wafer and said support;

dispensing chemicals or etchants onto said frontside of said wafer to form a chemical or etchant covered wafer while flowing said liquid in said gap;

after dispensing said chemicals or said etchant, and prior to dispensing DI DeIonized (DI) rinse water on said chemical or etchant covered wafer, dispensing a liquid or vapor having a lower surface tension than water onto said chemical or etchant covered wafer; and

after applying said vapor or liquid, dispensing DI rinse water onto said frontside of said spinning wafer.

43. (Currently Amended) The method of claim 42 further comprising applying megasonics energy to said backside of said wafer from said transducers while said dispensing of said chemical or said etchant.

44. (Currently Amended) The method of claim 42 further comprising heating said DI rinse water prior to applying said DI rinse water onto said frontside of said wafer.

45. (Currently Amended) The method of claim 44 wherein said DI rinse water is heated to a temperature between 60-70°C.

46. (Currently Amended) The method of claim 42 further comprising flowing said liquid into said gap between said backside of said wafer and said support, and applying megasonics energy to said backside of said wafer from said transducer while dispensing said DI rinse water onto said frontside of said wafer.

47. (New) The method of claim 32, further comprising after exposing said frontside of said spinning wafer to DI water, blowing a gas at the center of the frontside of said wafer while said wafer is spinning.

48. (New) The method of claim 37, further comprising after exposing said frontside of said spinning wafer to DI water, blowing a gas at the center of the frontside of said wafer while said wafer is spinning.

49. (New) The method of claim 40, further comprising after exposing said frontside of said spinning wafer to DI water, blowing a gas at the center of the frontside of said wafer while said wafer is spinning.

50. (New) The method of claim 42, further comprising after exposing said frontside of said spinning wafer to DI water, blowing a gas at the center of the frontside of said wafer while said wafer is spinning.